

ABSTRACT OF THE DISCLOSURE

A method and apparatus for retrieving information from a three dimensional storage medium uses a three dimensional storage medium having an active medium capable of exhibiting first and second states, a data unit being represented by the ratio between the concentration of the first and second states in a given volume portion of the medium and a data sequence is represented by a sequence of data units. The active medium is irradiated with light as to concentrate light flux through a volume portion of the storage medium so as to generate in the volume portion a detectable non-linear optical response characteristic of the concentration ratio, which is detected and used for tracking.